

LOUISIANA PRE K-12 EDUCATIONAL TECHNOLOGY STANDARDS

Adapted from the National Educational Technology Standards for Students



**Louisiana Department of Education
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EDUCATION

Approved by BESE
December 2008

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Mission Statement

The Louisiana Pre K-12 Educational Technology Standards for Students provide a framework for preparing students for learning in a global, digital society.

Philosophy

The Louisiana Pre K-12 Educational Technology Standards are based on the National Educational Technology Standards for Students (NETS-S) and the Louisiana State Content Standards. These technology standards support the beliefs set forth by the state educational technology goal: *“All Louisiana educators and learners will benefit from technology-rich environments that support student achievement and produce lifelong learners able to succeed in an information society.”*

The Louisiana Pre K-12 Educational Technology Standards are intended to be infused into the foundation skills and core understandings embodied in the Louisiana Content Standards. These standards and performance indicators are anticipated to assist teachers in preparing **all** students to be lifelong learners and contributing members of a global society. Infusion of these standards will be varied and dynamic, reflecting the diversity of instructional and student needs in our schools and districts.

All students must have regular opportunities to use technology to develop skills that encourage personal productivity, creativity, critical thinking, and collaboration in the classroom and in daily life. The technology standards promote the development of Information and Communication Technology (ICT) literate students who learn, plan, produce, and innovate in a digital world. These standards foster ethical usage and digital citizenship for a competitive global society.

Definition

ICT stands for information and communication technology. This acronym is used throughout much of the world in place of the word *technology* when referring to skills or standards for technology use.

Educational technology refers to the application of technology skills for learning.

As always, the focus is on learning with information and technology rather than learning about technology.

Pre K-12 Educational Technology Standards

1. Creativity and Innovation

- ◆ Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

2. Communication and Collaboration

- ◆ Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

3. Research and Information Fluency

- ◆ Students apply digital tools to gather, evaluate, and use information.

4. Critical Thinking, Problem Solving, and Decision Making

- ◆ Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

5. Digital Citizenship

- ◆ Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

6. Technology Operations and Concepts

- ◆ Students demonstrate a sound understanding of technology concepts, systems, and operations.

Performance Indicators for Grades Pre K-2

The following performance indicators should be used as standards in integrating technology into the content standards.

Pre K-12 Educational Technology Standards

- 1. Creativity and Innovation***
 - A. Illustrate and communicate original ideas and stories using electronic tools and media-rich resources. *(1, 2)*
 - B. Identify, research, and collect data on an issue using digital resources and propose a developmentally appropriate solution. *(1, 3, 4)*
 - C. Engage in learning activities with learners from multiple cultures through electronic means. *(2, 6)*
- 2. Communication and Collaboration***
 - D. In a collaborative work group, use a variety of technologies to produce a digital presentation or product in a grade level appropriate curriculum area. *(1, 2, 6)*
 - E. Find and evaluate information related to topic of interest using digital resources. *(3)*
- 3. Research and Information Fluency***
 - F. Use simulations and graphical organizers to explore and depict concepts. *(1, 3, 4)*
- 4. Critical Thinking, Problem Solving, and Decision Making***
 - G. Demonstrate the safe, ethical, and cooperative use of technology. *(5)*
 - H. Independently apply digital tools and resources to address a variety of tasks and problems. *(4, 6)*
 - I. Communicate about technology using developmentally appropriate and accurate terminology. *(6)*
- 5. Digital Citizenship***
 - J. Demonstrate the ability to navigate in virtual environments such as electronic books, simulation software, and the Internet. *(6)*
- 6. Technology Operation and Concepts***

Performance Indicators for Grades 3-5

The following performance indicators should be used as standards in integrating technology into the content standards.

Pre K-12 Educational Technology Standards

- 1. Creativity and Innovation***
 - A. Produce a media-rich digital presentation. (1, 2, 3, 4)
 - B. Use digital-imaging technology to modify or create original works. (1, 2, 6)
 - C. Recognize bias in digital resources while researching an issue with guidance from the teacher. (3, 4)
 - D. Select and use digital tools, instruments, and measurement devices to collect, organize, and analyze data while conducting experiments, evaluating theories and/or testing hypotheses. (3, 4, 6)
- 2. Communication and Collaboration***
 - E. Identify and investigate a world issue and generate a possible solution using digital tools and resources. (3, 4)
 - F. Conceptualize, guide, and manage individual or group learning projects using digital tools with teacher support. (4, 6)
- 3. Research and Information Fluency***
 - G. Practice injury prevention by applying a variety of ergonomic strategies when using technology. (5)
- 4. Critical Thinking, Problem Solving, and Decision Making***
 - H. Discuss the ethical use of technologies and the effect of existing and emerging technologies on individuals, society, and the global community. (5, 6)
 - I. Communicate about technology using developmentally appropriate and accurate terminology. (6)
- 5. Digital Citizenship***
 - J. Apply previous knowledge of digital technology operations to analyze and resolve current hardware and software issues. (4, 6)
- 6. Technology Operation and Concepts***

Performance Indicators for Grades 6-8

The following performance indicators should be used as standards in integrating technology into the content standards.

Pre K-12 Educational Technology Standards

- 1. Creativity and Innovation***
 - A. Apply existing knowledge to create original works as a means of personal or group expression (1, 2, 6)
 - B. Describe and illustrate a grade level appropriate concept or process using a model, simulation, or concept-mapping software (1, 2)
 - C. Use collaborative electronic authoring tools to explore common curriculum content from multicultural perspectives with other learners. (2, 3, 4, 5)
 - D. Participate in a cooperative learning project in an online learning community or virtual environment. (2)
- 2. Communication and Collaboration***
 - E. Integrate a variety of file types to create and illustrate a document or presentation (1,6)
- 3. Research and Information Fluency***
 - F. Evaluate electronic resources to determine the credibility of the author and publisher, and the accuracy of the content. (3, 4, 5)
 - G. Use appropriate tools to collect, view, analyze and ethically use information from a variety of sources and media to process data and report results (1, 3, 4, 5)
- 4. Critical Thinking, Problem Solving, and Decision Making***
 - H. Gather data, examine patterns, and apply information for decision making using electronic tools and resources. (1, 4)
- 5. Digital Citizenship***
 - I. Use information, media, and technology in a safe, ethical and responsible manner which includes following the school's acceptable use policy, adhering to copyright laws, respecting the rights of others, and employing proper etiquette in all forms of communication. (5)
- 6. Technology Operation and Concepts***
 - J. Demonstrate responsible digital citizenship including the respect for intellectual property of others (3, 5)
 - K. Develop and apply strategies for identifying and solving routine hardware and software problems. (4, 6)
 - L. Successfully complete online assessments and/or surveys

Performance Indicators for Grades 9-12

The following performance indicators should be used as standards in integrating technology into the content standards.

Pre K-12 Educational Technology Standards

- 1. Creativity and Innovation***
 - A. Design, develop, test, and evaluate a model or simulation (i.e. digital learning game) to demonstrate knowledge and skills related to curriculum content. *(1,4)*
 - B. Create and publish an online collection (i.e. Art gallery, Geometric toolbox, Timelines, etc.) of examples and commentary that demonstrate an understanding of different historical periods, cultures, and countries. *(1,2)*
 - C. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness. *(3,6)*
- 2. Communication and Collaboration***
 - D. Design a cooperative learning project for an online community. *(1,2,4)*
 - E. Identify a complex global issue, develop a systematic plan of investigation, and present a viable solution. *(1,2,3,4)*
- 3. Research and Information Fluency***
 - F. Analyze the capabilities and limitations of current and emerging technology resources and assess their potential to address personal, social, lifelong learning, and future career needs. *(4,5,6)*
- 4. Critical Thinking, Problem Solving, and Decision Making***
 - G. Design a user friendly Web site that meets accessibility requirements. *(1,5)*
 - H. Model legal and ethical behaviors when using information and technology by selecting, acquiring, and citing resources. *(3,5)*
- 5. Digital Citizenship***
 - I. Create electronic media-rich presentations for other students on the appropriate and ethical use of digital tools and resources. *(1,5)*
- 6. Technology Operation and Concepts***
 - J. Configure and troubleshoot hardware, software, and network systems to maximize their use for learning and productivity. *(4,6)*
 - K. Successfully complete online assessments and/or surveys. *(6)*

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